Vienna states that in the Delessert Herbarium there is a specimen of L. Claytoniana, sent by Michaux himself, which differs from L. spicata Lamarck by the presence of well-marked calyx-appendages. Professor Wimmer considers this plant to be closely related to, or identical with, L. leptostachys A.DC. In view of these facts, it is interesting to see that Elliott's "Lobelia Claytoniana" from Columbia, S. C. is the plant now known as L. spicata Lam., var. leptostachys (A.DC.) Mack. & Bush.

In the "Sketch" the author states that he has seen material of "Lobelia pallida" from Pennsylvania, Tennessee, St. Mary's, Georgia and the low country of South Carolina. His herbarium indicates that "L. pallida" from Pennsylvania was L. spicata var. scaposa, and that that from St. Mary's, Ga., was L. paludosa Nutt. This bears out the conclusions previously stated by the present writer.²

The only new name proposed by Elliott was a variety glabella of Lobelia puberula, referred to above. The type locality was given as Chatham Co., Georgia. This variety was said to be very smooth, with linear-lanceolate leaves, and to be a possible intermediate between L. puberula and L. glandulosa. No material of it was found in the Elliott herbarium, so that the correct application of the name remains in doubt. However, the description given by Elliott leads one to suppose that he had in mind a smooth, nearly eglandular plant of L. glandulosa; such individuals are not uncommon in that species. L. puberula var. glabella Ell. probably does not refer to L. elongata Small, however, as was previously stated; Elliott was evidently familiar with L. elongata, under the name of "L. amoena."

UNIVERSITY OF GEORGIA

NEW COMBINATIONS AND UNDESCRIBED FORMS FROM MISSOURI

JULIAN A. STEYERMARK

All specimens cited below may be found in the Herbarium of the Missouri Botanical Garden.

Lophotocarpus calycinus (Engelm.) J. G. Smith, forma **fluitans** (Engelm.) Steyermark, comb. nov., Sagittaria calycina var. fluitans Engelm. in Torr. Bot. Mex. Bound Surv. 212. 1859; Lophotocarpus

ELLIOTT, STEPHEN, op. cit. 1: 265.

² Rhodora 38: 318 and 350. 1936.

³ Rhodora 38: 292. 1936.

fluitans (Engelm.) J. G. Smith, Rep. Mo. Bot. Gard. 11: 145, pl. 53. 1900.

The submerged aquatic state of this species with narrower leaves and slender scapes and petioles can be considered but an ecological phase of the normal type. Plants referred to this form grew in deeper water (about 2 feet deep) than the ordinary type which occurred nearer shore and in shallower water.—Missouri: in Coldwater creek, at Nations Mill, above dam, 3 mi. northeast of Womack, T. 35 N. R 8 E, sect. 27, Ste. Genevieve Co., Aug. 21, 1936, Steyermark 21097.

Camassia scilloides (Raf.) Cory, forma **Petersenii** Steyermark, f. nov., a forma typica recedit foliis 15–40 mm. latis.—Missouri: limestone slopes, Osage Hills, St. Louis Co., April 29, 1936, *Petersen*; same locality, April 23, 1937, *Steyermark 22499*, Type in Mo. Bot. Gard. herb.

Many plants belonging to this form were found on open south-facing limestone slopes in this locality. Many plants of the ordinary type were growing with the form. Besides the much broader leaves, this new form has somewhat stouter and more rounded bulbs 2–5 cm. in diameter, stouter and somewhat more densely flowered racemes, the stout scape measuring as thick as 1.0 centimeter. However, while some of the plants referred to this form appear distinct in the extreme, too many transitional specimens occur to warrant treating this as any more than a mere robust broader-leaved phase of the species.

Thalictum dasycarpum Fisch. & Lall., forma **hypoglaucum** (Rydberg) Steyermark, comb. nov. *Thalictrum hypoglaucum* Rydberg, Brittonia 1: 88. 1931.

Rydberg separates his Thalictrum hypoglaucum from T. dasycarpum by the combination chiefly of smaller flowers and leaves glabrous and paler on the lower surface. There is sufficient variation, however, in the floral dimensions of the two species to cause too much intergradation between the species. After sorting out the differences between them, the glabrity of the under surface of the leaves is all that remains to distinguish T. hypoglaucum from T. dasycarpum. This glabrous condition appears rather frequently in plants growing with the ordinary finely pubescent-leaved type, and with no particular geographical range to characterize it, it is here considered a mere form of the species.—Missouri: low banks along North Fork of White river, near Rainbow (Double) Spring, 4 mi. northeast of Dormis, Ozark Co., May 16, 1936, Steyermark 10449; low woods along fork of Wyaconda river, between Arbela and Azen, Scotland Co., May 20, 1936, Steyermark 10786.

Apios americana Medic., forma **pilosa** Steyermark, f. nov., a forma typica recedit caulibus foliisque pilosis.—Missouri: banks of Mud creek, T 26 N, R 7 E, sect. 20, 2 mi. northwest of Rombauer, Wappapello Purchase Unit, Clark National Forest, Butler Co., July 7, 1936, Steyermark 11390, Type in Mo. Bot. Gard. herb; along Little Paddy creek, 5 mi. southwest of Slabtown, Texas Co., Gardner National forest, Aug. 25, 1937, Steyermark 25316.

This form, with hairs spreading on stems and scattered over the leaf surfaces, is of infrequent occurrence in Missouri, occurring with the normally glabrous or glabrate type.

Impatiens pallida Nutt., forma dichroma Steyermark, f. nov., a forma typica recedit petalis superioribus lateralibusque albis et sepalo posteriore luteo.—Missouri: wooded base of bluffs along Mississippi river, 1½ mi. northwest of Louisiana, T 54 N, R 2 W, sect. 11, Pike Co., Sept. 6, 1937, Steyermark 25927, TYPE in Mo. Bot. Gard. herb.

Two other color variants of the normally yellow-flowered *Impatiens* pallida have already been described, one in 1904 by Clute, *I. pallida* var. alba with pure white flowers (Am. Bot. 7: 67. 1904), and the other in 1920 by Jennings, *I. pallida* f. speciosa with cream-colored flowers which have the ventral inner surface of the saccate sepal dotted with red (Ohio Journ. Sci. 20: 204. 1920). The form here described is two-colored, the upper and lateral petals being white, while the posterior saccate sepal is yellow.

Rudbeckia hirta L., forma homochroma Steyermark, f. nov., a forma typica recedit disci floribus luteis.—Missouri: upland woods, 10 mi. west of New Liberty, Fristoe Purchase Unit, Clark National Forest, Oregon Co., July 3, 1936, Steyermark 11345, Type in Mo. Bot. Gard. herb.

Numerous color variations of this species have already been described. The above described form, however, with the disk- as well as the ray-florets yellow throughout, has not been recorded. This form was found with the normally bi-colored type.

FIELD MUSEUM OF NATURAL HISTORY, Chicago, Illinois

A Flora of Oklahoma.—There has recently appeared a rather sumptuous, well printed and neatly illustrated book of more than 700 pages and nearly 500 text-figures upon the Oklahoma Flora.¹ As the first extensive

OKLAHOMA FLORA (Illustrated) by Thomas R. Stemen and W. Stanley Myers. Harlow Publishing Corp., Oklahoma City, Okla. \$6.00.